

## **MOBILE SOFTWARE MORPHING AGENT**

### **ABSTRACT OF THE DISCLOSURE**

Systems and methods for extending or modifying the behavior of mobile (downloadable) software, such as JavaScript, HTML, and/or data that can be downloaded to a client device.

- 5 One or more morphing agents are provided for translating and modifying code and data from a software source, such as a remote server. Each morphing agent translates and modifies one or more particular types of code. For example, one morphing agent may be provided for processing JavaScript code and another may be provided for processing HTML code and data. Each morphing agent typically includes a tokenizer module, a parser module and a
- 10 translation module, each of which follows specific rule sets. Original software content is first tokenized according to a set of tokenizer rules, and subsequently parsed according to a set of parser rules. The parsed code is then translated according to the set of translator rules to produce the desired modified software content. An exception handler module is also provided for implementing exception rules when an exception occurs.

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